

Seaeye Falcon^{DR}

REMOTELY OPERATED VEHICLE (ROV)

A ROV is a tethered underwater robot. This highly manoeuvrable vehicle can be operated by a person on a vessel at the surface linked by an umbilical cable carrying electrical power, video and data signals. This one is owned by the University of Plymouth and is tailor made for scientific research.

Kongsberg HD Video

Increasingly over the last few years HD video surveys are being used to replace the older digital video (DV) standard (640 x 480 pixels), which limits identification to specimens greater than 5cm in size in a 1m² image. High Definition (HD) cameras (1920 x 1080 pixels) have almost 7 times the resolution of DV allowing us to see much more detail and even smaller organisms.

Valeport CTD

The CTD transmits conductivity, temperature and depth readings from the sea floor.

TRITECH Sonar

Sonar can paint an accurate picture in sound allowing the ROV to see its environment far beyond the range of the on-board cameras.

Altimeter

Allows us to measure how high the ROV is flying above the seabed.

Laser Scaling

Laser diodes provide pinpoints at a set distance apart providing a scale to estimate the size of objects viewed by the cameras.

USBL

The Ultra Short Base Line system attached to the ROV provides accurate GPS positioning.



Quick Facts

- One Thousand One Hundred** – The number of metres of umbilical cable we carry.
- One Thousand** – the depth in metres which the ROV can operate at. The ROV is **DR** – Deep Rated
- Five** – function manipulator arm allows the pilot to perform dexterous tasks such as picking up samples and untangling ropes
- Three** – the number of cameras on board: 1x Kongsberg HD video, 1x Kongsberg-Simrad stills camera with flash, 1x standard definition colour zoom camera. There are also 3 headlights to illuminate the deep sea and allow our cameras to pick up every detail.



PRIMaRE

The Peninsula Research Institute for Marine Renewable Energy (PRIMaRE), is a joint venture between the Universities of Plymouth and Exeter, bringing together a team of international researchers and world class facilities to accelerate the development of technology and address the most critical challenges facing the marine renewable energy industry. PRIMaRE is funded by the South West Regional Development Agency and ERDF Convergence and Competitiveness programmes. PRIMaRE aided in the funding of this ROV.

Available For Hire

If you would like to hire this ROV or would like more information, please contact Dr Kerry Howell at the University of Plymouth
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